intensive care unit bed). The mean direct medical expenditures for one patient is 25,858 CZK (€1,034) per year. **CONCLUSIONS:** Based on data from Institute of Health Information and Statistics of the Czech Republic in 2006 there were 678 760 type 2 diabetic patients in our country. It it roughly 17.5 bilion CZK (€0.7 bil) per year, counting approximately 20% of total health care spending in Czech Republic.

PDB32

MEDICAL COSTS ATTRIBUTABLE TO OBESITY IN PATIENTS WITH DIABETES MELLITUS AMONG U.S. ADULTS

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OBJECTIVES: To estimate the annual medical costs attributable to obesity in diabetic patients. **METHODS:** This cross-sectional analysis was based on the 2001–2005 Medical Expenditure Panel Survey data, a nationally representative sample of the U.S. non-institutionalized population. A total of 4880 diabetic patients were identified based on the ICD-9-CM code:250 after excluding patients with pregnancy, malignancy, kidney dialysis, immunodeficiency, or >75years old. Diabetic patients were classified as normal (body mass index(BMI):18.5–<25), overweight(BMI:25–<30), or obese(BMI:≥30). Medical costs included costs associated with any treatments except dental problems and injuries. The parameters for obese patients were estimated using a generalized linear model with a log link function and a gamma distribution after adjusting for the demographic variables. The mean medical cost was predicted for normal-weight patients using the parameters estimated from the obese patients. The difference between the predicted and the observed costs in normal weight patients was the medical costs attributable to obesity. All costs were converted to 2005 U.S. dollars using price indices. Data were analyzed using SAS and SUDAAN. **RESULTS:** The age-adjusted prevalence of the study diabetic patients was 2.1% in normal-weight, 3.9% in overweight, and 9.7% in obese patients respectively. The average attributable costs to obesity in diabetic patients were $1,527 (95%CI:$318–$2736). The average attributable costs to obesity increased as patients became older ($794 for aged 18–50, $1636 for aged 51–64, and $2044 for aged 65–74) and were higher in women ($2679) than men ($139), and in private insurance ($2185) compared to public insurance ($591). **CONCLUSIONS:** The prevalence of diabetes in obese people was approximately five times higher than in normal-weight people. The medical costs for obese patients with diabetes were significantly higher than in normal weight patients. The effective public health intervention aimed at controlling weight in diabetic patients is recommended to reduce the extra economic burden of obesity.

PDB33

COST COMPARISON OF INSULIN GLARGINE AND INSULIN DETEMIR IN TYPE 2 DIABETES MELLITUS IN ARGENTINA: A TRIAL-BASED PROBABILISTIC MODEL

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OBJECTIVES: To estimate and compare the economic implications of insulin glargine (GLAR) and detemir (DET) therapy initiation in a population with type 2 diabetes mellitus (T2DM) with a one year time horizon, from major insurers perspectives in Argentina (union-based and private HMOs). **METHODS:** Clinical and efficacy parameters and their distributions were based on Rosenstock's article (2008), a 52-week randomized treat-to-target trial which compared clinical outcomes following supplementation of oral glucose-lowering drugs with basal insulin analogues, DET and GLAR, in T2DM patients. Resource use and cost values, as well as their distributions, were obtained from Argentinean published literature, tariffs, databases, experts' opinion and the international literature. Costs are expressed in local currency, year 2008 (exchange rate 1€ = 4.79ARG$). Variability was incorporated in insulin, needles and strips costs, proportion of DET patients with once daily injection and GLAR and DET dose per kilogram. Probabilistic sensitivity analysis (PSA) was carried out based on Monte Carlo simulations with 10,000 iterations. Linear regression analysis was carried out in order to gauge the relative influence on the results related to the uncertainty around each parameter. **RESULTS:** Annual mean cost was $2630 for GLAR and $4,092 for DET, implying a 36% (95%CI 33.2%; 37.9%) total cost saving with GLAR ($1462). A total of 82.7% of this difference was explained by the lower average daily dose requirement with GLAR (GLAR 26 UI *vs.* DET 42 UI). Savings in test strips, and needles explained 10.2% and 7.1% of the total difference. In the regression analysis, the most important parameters explaining variability in total cost savings were the proportion of DET patients requiring twice daily injections followed by the insulin dose per patient. **CONCLUSIONS:** In Argentina, Insulin Glargine was associated with a cost saving of more than one third compared to the use of Insulin Detemir. Sensitivity analyses confirmed the robustness of this result.

PDB34

MONITORING OF TREATMENT COSTS AFTER REIMBURSEMENT DECISION: SOMATOSTATIN ANALOGUES FOR ACROMEGALY

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OBJECTIVES: To compare the economic impact of the treatment of acromegaly with two different somatostatin analogues in Brazil, after the decision of reimbursement of the therapeutic class by the Brazilian Public Health Care System (SUS) in 2002. **METHODS:** Acromegaly treatment cost estimation was based on secondary data and on a decision analytical model developed from the Brazilian Public Health Care System Clinical Guideline for Acromegaly. The strategies of using somatostatin analogues in depot presentations (octreotide LAR or lanreotide SR) were compared. The model followed a hypothetical cohort of 276 patients diagnosed with acromegaly for two years. Costing included direct medical costs, composed by drugs, consultations, monitoring tests, radiotherapy and hospitalisation, under the Brazilian Public Health Care System perspective. Data were extracted from national and international literature, and from administrative official databases (Ambulatory Information System, Hospital Information System, Mortality Information System). Costs are reported in 2005 Reais (R$) and Euros (€). Official exchange rate was used for currency conversion (2.77 BRL = 1 EUR, Brazilian Central Bank). Sensitivity analysis was conducted. **RESULTS:** Octreotide LAR treatment strategy presented net savings of R$10,448,324 (€3,771,958) to the Brazilian Public Health Care System when compared to lanreotide SR treatment strategy in a period of two years. Average annual cost